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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/695,549	10/28/2003	Rycharde Jeffery Hawkes	30018432-2	5467

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EXAMINER	
STEVENS, THOMAS H	

ART UNIT	PAPER NUMBER
2121	

NOTIFICATION DATE	DELIVERY MODE
01/07/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/695,549	HAWKES ET AL.	
	Examiner	Art Unit	
	THOMAS H. STEVENS	2121	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-6,8-11,13 and 14* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3-5,8-11,13 and 14* is/are rejected.

7)☒ Claim(s) *6* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1,3-6,8-11,13-14 were examined.

Section I: Non-Final Rejection

2. Claim 6 is objected to as being dependent upon a rejected base claim, i.e., first version utilizing a neural network, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1,3-5,8-11,13-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Perlin et al. (US Patent 6,285,380; hereafter Perlin). Perlin discloses a system for the creation of real-time, behavior-based animated actors (abstract).

Claim 1. A method of simulating (column 19, lines 30-32) a creature (column 4, lines 37-40) for use in two different complexities (figure 1, elements 101,102,103) of

simulation (column 4, lines 37-40), the method comprising: utilizing a model (using or utilizing the simulation model; column 5, lines 20-28)of the creature (column 4, lines 37-40) that comprises at least two portions: a first portion (column 21, line 30) which contains functions for use in both of said different complexities (figure 1, elements 101,102,103) ("incorporate complex simulation models", column 5, lines 24-25) of simulation (column 4, lines 37-40); and a second portion (column 21, line 31) comprising two alternative versions: a first version(suggestion of local versions being used , column 16, lines 1-6) for use in one of said different complexities (figure 1, elements 101,102,103) ("incorporate complex simulation models", column 5, lines 24-25) of simulation (column 4, lines 37-40); and a second version (suggestion of local versions being used , column 16, lines 1-6) for use in the other of said different complexities (figure 1, elements 101,102,103) ("incorporate complex simulation models", column 5, lines 24-25) of simulation (column 4, lines 37-40) wherein said first portion (column 21, line 30) comprises a behavior selection (behavior engine, element 30)mechanism arranged to select the behavior of said creature (column 4, lines 37-40) and said second portion (column 21, line 31) is arranged to execute the selected behavior (behavior engine, element 30).

Claim 3. A method as claimed in claim 2 1, wherein said behavior selection mechanism (figure 1, behavior engine) is arranged to select the behavior based upon at least one of: the current behavioral state(behavior engine, element 30); one or more internal state variables of the creature(column 4, lines 37-40);

the environment surrounding the creature(column 4, lines 37-40); and one or more sensory inputs to said creature(column 4, lines 37-40).

Claim 4. A method as claimed in claim 2 1, wherein said behavior selection mechanism consists of a set of mutually exclusive behavioral states (figure 6, elements 101,102, and 103 are mutually exclusive to one another).

Claim 5. A method as claimed in claim 1, wherein the second version (suggestion of local versions being used , column 16, lines 1-6) is for use in the less complex of the simulations (column 4, lines 37-40), and is arranged to approximate the functionality of the first version (suggestion of local versions being used , column 16, lines 1-6).

Claim 8. A method as claimed in claim 1, wherein the first version (not clearly defined within the disclosure; the Office interprets this limitation local versions being used , column 16, lines 1-6) utilizes a three dimensional (column 19, lines 57-65) physical simulation (column 4, lines 37-40) of an animat (animated actors, title), and the second version (not clearly defined within the disclosure; the Office interprets this limitation local versions being used , column 16, lines 1-6) utilizes a parameterized model of the animat (animated actors, title)to approximate movement.

Claim 9. A method of simulating activities of a plurality of creature (column 4, lines 37-40)s, the method comprising utilizing at least two modes of simulation (column 4, lines 37-40): a first mode (e.g., high-level, column 15, lines 24-25) arranged to simulate (column 19, lines 30-32) the activities of all of said creatures (column 4, lines 37-40);

and a second mode (e.g., low-level, column 15, lines 24-25) arranged to simulate(column 19, lines 30-32) an activity of at least one of said creatures (column 4, lines 37-40) at a more detailed level than said first mode (e.g., high-level, column 15, lines 24-25), wherein a model of a creature (column 4, lines 37-40) simulated in both modes of simulation (column 4, lines 37-40) comprises at least two portions: a first portion (column 21, line 30) which contains functions arranged for use in both of said modes of simulation (column 4, lines 37-40); and a second portion (column 21, line 31) comprising two alternative versions, (not clearly defined within the disclosure; the Office interprets this limitation local versions being used , column 16, lines 1-6) a first version (not clearly defined within the disclosure; the Office interprets this limitation local versions being used , column 16, lines 1-6) for use in said first mode (e.g., high-level, column 15, lines 24-25) of simulation (column 4, lines 37-40), and a second version (suggestion of local versions being used , column 16, lines 1-6) for use in the second mode (e.g., low-level, column 15, lines 24-25).

Claim 10. A method of simulating(column 19, lines 30-32) a process at two different levels of complexity("incorporate complex simulation models", column 5, lines 24-25), the method comprising: utilizing a model (using or utilizing the simulation model; column 5, lines 20-28)that comprises at least two portions: a first portion (column 21, line 30) which contains functions for use in both of said different complexities (figure 1, elements 101,102,103) of simulation (column 4, lines 37-40); and a second portion (column 21, line 31) comprising two alternative versions: a first version (not clearly

defined within the disclosure; the Office interprets this limitation local versions being used , column 16, lines 1-6) for use in one of said different complexities (figure 1, elements 101,102,103) ("incorporate complex simulation models", column 5, lines 24-25) of simulation (column 4, lines 37-40); and a second version (not clearly defined within the disclosure; the Office interprets this limitation local versions being used , column 16, lines 1-6) for use in the other of said different complexities (figure 1, elements 101,102,103) ("incorporate complex simulation models", column 5, lines 24-25) of simulation (column 4, lines 37-40), wherein the second versions (not clearly defined within the disclosure; the Office interprets this limitation local versions being used , column 16, lines 1-6) is for use in the less complex (too broad; the Office provides an example of behavior engine simply executing three animated characters, column 16, lines 15-18) of the simulations (column 4, lines 37-40), and is arranged to approximate the functionality of the first version(not clearly defined within the disclosure; the Office interprets this limitation local versions being used , column 16, lines 1-6).

Claim 11. A method as claimed in claim 10, further comprising evaluating one or more conditions to determine a result of a rule for selecting which of the two alternative versions(not clearly defined within the disclosure; the Office interprets this limitation local versions being used , column 16, lines 1-6) of the second portion (column 21, line 31) to use in simulating the process(column 19, lines 30-32).

Claim 13. A method as claimed in claim 10, wherein the first version (suggestion of local versions being used , column 16, lines 1-6)utilizes a neural network.

Claim 14. A simulator device arranged to simulate a creature (column 4, lines 37-40) in two different complexities (figure 1, elements 101,102,103) ("incorporate complex simulation models", column 5, lines 24-25) of simulation (column 4, lines 37-40), the device being arranged to utilize (using or utilizing the simulation model; column 5, lines 20-28)a model of the creature (column 4, lines 37-40) that comprises at least two portions: a first portion (column 21, line 30) which contains functions used in both of said different complexities (figure 1, elements 101,102,103) ("incorporate complex simulation models", column 5, lines 24-25) of simulation (column 4, lines 37-40); and a second portion (column 21, line 31) comprising two alternative versions, (not clearly defined within the disclosure; the Office interprets this limitation local versions being used , column 16, lines 1-6) a first version(not clearly defined within the disclosure; the Office interprets this limitation local versions being used , column 16, lines 1-6) used in one of said different complexities (figure 1, elements 101,102,103) ("incorporate complex simulation models", column 5, lines 24-25) of simulation (column 4, lines 37-40), and second version (not clearly defined within the disclosure; the Office interprets this limitation local versions being used , column 16, lines 1-6) used in the other of said different complexities (figure 1, elements 101,102,103) ("incorporate complex simulation models", column 5, lines 24-25) of simulation (column 4, lines 37-40), wherein the second version (not clearly defined within the disclosure; the Office interprets this limitation local versions being used , column 16, lines 1-6) is for use in

the less complex (too broad; the Office provides an example of behavior engine simply executing three animated characters, column 16, lines 15-18) of the simulations (column 4, lines 37-40), and is arranged to approximate the functionality of the first version(suggestion of local versions being used , column 16, lines 1-6).

Section II: Response to Arguments

Objections

5. Withdrawn.

112

6. Applicants are thanked for addressing this issue and clarification. Rejection is withdrawn.

102(b)

7. Applicants are thanked for addressing this issue. It's obvious applicants are steadfast on verbatim of the limitations while the Office's position is both verbatim and equivalence. Firstly to utilize something, as defined by www.dictionary.com is to put to use, thus simulating or simulation of event; in this instance Perlin discloses using an

animation engine that utilizes descriptions of atomic animated actions with a behavior engine. The connection or relationship relative to the prior art is the animated actions are the same as the said creatures in the application to which the creatures are utilized by the behavior engine of Perlin (also, the simulation modeling is stated by Perlin in column 5, lines 21-31, in particular line 25). The claims are simple regarding the first and second portions to which broad enough to be interpreted in any number of ways. It's highly suggested, for compact prosecution, that applicants add more detail to the claims in order to obviate anticipation of this limitation by Perlin. To repeat, www.dictionary.com defines complexity as composed of many interconnected parts. Perlin denotes three interconnected parts in figure 1 i.e., elements 101,102 and 103 of this network that are directed linked to the simulation. Nowhere are the claims depicted **different levels of complexity**, just different complexities. In summary, applicants are rebutting in detail very board claims. Rejection is maintained.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mr. Tom Stevens whose telephone number is 571-272-3715.

If attempts to reach the examiner by telephone are unsuccessful, please contact examiner's supervisor Mr. Albert Decady (571-272-3819). The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov.. Answers to questions regarding access to the Private PAIR system, contact the Electronic Business Center (EBC) (toll-free (866-217-9197)).

/Albert Decady /
Supervisory Patent Examiner
Tech Center 2100

/Thomas H. Stevens/

Examiner, Art Unit 2121